

heads on each rolling arm into position to clamp onto an associated, aligned bearing. A hydraulic cylinder on each arm is next actuated for sliding travel of the second movable rolling head along cooperating guide and bearings surfaces on the head and on the arm to push the crankshaft tightly against the

5 fixed, opposite first rolling head. With each of the paired rolling heads clamped onto their respectively associated workpiece bearing, the arm carriage assembly is lowered from the rolling arms which are now supported by the clamped jaw heads on the crankshaft and substantially vertically extending support levers or hanger members which are pivotally connected

10 at locations intermediate the opposite ends of the elongated rolling arms and at the upper support therefor. A counterweight force is applied to the end of the rolling arm opposite the rolling head end of the rolling arm with the pivot lever being pivotally connected at the pivot location intermediate the counterweight end and the rolling head end of the rolling arm. Thus, each

15 pin rolling arm is supported and allowed to swing and to move freely to follow the path of its associated pin bearing.

At the end of the rolling cycle of operation, the crankshaft is stopped at a predetermined rotational position and the arm support carriage is raised to support the rolling arms. The hydraulic cylinders are operated to

20 slide the second rolling heads from the crankshaft rolling position to the open jaw position. The headstock and tailstock are opened to release the crankshaft and the rolling arms are lowered by the support carriage with the crankshaft being lifted and unloaded from the rolling machine. Thereafter, a new crankshaft to be rolled is loaded between the headstock and tailstock to

25 start a new cycle.

Brief Description of the Drawings

FIG. 1 is a side elevational view of a rolling arm having rolling devices thereon actuated to grip a bearing of a crankshaft in accordance with the invention;

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The claim of this patent contains at least one drawing  
executed in color.